INFECTIOUS LARYNGOTRACHEITIS AT FAIRS

R. M. Fulton, D.V.M., Ph.D.; Nancy Barr, D.V.M.; and Darrin Karcher, Ph.D.

Infectious laryngotracheitis, also known as LT or ILT, has often caused disease outbreaks at fairs in Michigan. ILT is a viral disease of chickens that can also cause disease in peafowl and pheasants. It typically causes a drastic death loss in a flock. ILT is easily spread by birds that have survived the disease, birds that have been vaccinated with a live vaccine (other than a pox-vectored vaccine), people, supplies (such as egg cartons), and equipment. Birds that have recovered from ILT infection or were vaccinated with a live ILT vaccine are considered to be infected for the rest of their life.

At fairs, birds that have been vaccinated with a live vaccine are usually housed in the same barns with birds that have not been vaccinated for ILT. This creates a problem. The virus that causes ILT behaves like the cold sore virus of humans (Herpes Simplex 1). Don't worry, you can't give chickens the cold sore virus nor can you get ILT from your chickens. With the human cold sore virus, people are exposed to that virus when they are children. The cold sore virus does not cause problems until people go through a stressful time, such as a fever. When people are under stress, their immune system cannot continue to fight the virus and cold sores, which contain the virus, develop.

A similar thing happens with the ILT virus in chickens. When chickens survive infection or they are vaccinated with a live ILT vaccine, the virus hides in the chicken's body until it is stressed. At fair time, chickens are removed from their home environment, put in a motor vehicle, transported to a fair and mixed with other chickens that are strangers to them. All of those things are extremely stressful to a chicken. With that stress, the vaccinated birds do not get sick but the virus is spread to birds that have not been vaccinated. Non-vaccinated birds get sick, have difficulty breathing, cough, sometimes they cough up blood, and most will die from the infection. ILT is hard to detect in healthy chickens and in birds vaccinated with live ILT vaccine and thus it can cause lots of problems at fairs. In Michigan, this disease is a reportable disease which means that if you suspect ILT, you must call the Michigan Department of Agriculture and Rural Development's State Veterinarian's Office at 517-373-1077.

In some counties in Michigan, this disease has caused such a problem that they no longer have chickens at their fair. This does not have to happen in your county if people would follow rules and be considerate of other people's chickens. Fairs could choose to not allow birds that have been vaccinated with live ILT vaccine into their Fair. This choice is hard to enforce since it depends on people's honesty and you cannot tell a vaccinated bird from a non-vaccinated bird just by looking at it. An alternative to the regular live ILT vaccine is a recently developed ILT vaccine that does not have the entire virus in it. Scientists have been able to take a small part of the ILT virus, which protects chickens from the disease, and put it into a live pox virus. This new vaccine is referred to as a pox-vectored vaccine. When you use the pox-vectored vaccine to vaccinate your chickens, they get vaccinated for 2 or more diseases at the same time, namely ILT, pox and Avian Encephalomyelitis (AE) diseases. Currently, there are only two vaccines on the market that are pox-vectored ILT vaccines. Both vaccines are made by Ceva USA and are called Vectormune®FP LT and Vectormune®FP LT+AE. Since there is no live ILT virus in these vaccines, there is no danger of it spreading to other non-vaccinated chickens.

ILT can easily spread from small flocks to commercial flocks. If that happens, it would not be unusual for over 1,000 chickens to die a day from this disease in a single flock of 100,000
chickens. So, be a good neighbor and don’t vaccinate for ILT or only use pox-vectored ILT vaccine. For more information, you may call Dr. R. M. Fulton at 517-353-3701. Dr. Fulton is an avian pathologist at Michigan State University’s Diagnostic Center for Population and Animal Health (DCPAH).